

The following substantial changes to the **National Electrical Code** are a part of the 2008 NEC and will become effective on **January 1, 2008**, for **NEW RESIDENTIAL CONSTRUCTION, NEW ADDITIONS AND ALTERATIONS**. They **DO NOT AFFECT** the replacement or repair of existing electrical devices or installations. There are many other changes contained in the 2008 NEC, both residential and commercial in nature, and the reader is advised to consult the 2008 NEC for the complete text of all changes. Contact your local building official for clarification of new construction vs. repairs if necessary.

1. Article 100; The term “clothes closet” was defined to mean “a non-habitable room or space intended primarily for the storage of garments and apparel.” This definition will apply to other electrical requirements for these spaces found in 240.24(D), 410.8 and 550.11(A)
2. Another definition added to the 2008 NEC is that of “Intersystem Bonding Termination.” This is a device that provides a means for connecting communications systems grounding and/or bonding conductor(s) at the service equipment. Rules for this equipment are found in 250.94 as well as in Chapters 7 and 8.
3. The definition of the term “kitchen” was added to the 2008 NEC. It is defined as an area with a sink and *permanent facilities* for food preparation and cooking. Temporary facilities, such as portable hot plates or portable microwave ovens, do not constitute a kitchen area for the purposes of equipping the area with receptacles or for the application of other relevant requirements of the NEC.
4. Section 210.4 now requires the grouping of the ungrounded conductors of multi-wire branch circuits. The conductors shall be tied with wire ties or other similar means in at least one location within the panel. Conductors of a multi-wire branch circuit have always been required to terminate in a breaker that de-energizes all ungrounded conductors simultaneously.
5. Exceptions No. 1 and No. 2 to Section 210.8(A)(2) and (A)(5) dealing with GFCI outlets in dwelling units have been deleted. All 125-volt, single phase, 15- and 20-ampere receptacles in dwelling unit (unfinished) basements, garages and accessory buildings are now required to be GFCI-protected. This now includes outlets for sump pumps, dedicated outlets for freezers and other stationery equipment, laundry appliance outlets, ceiling outlets for garage door openers, and all other outlets found in these locations which were previously excluded. Exceptions remain in place for outlets dedicated to fire alarm or burglar alarm systems.
6. Section 210.12(B) dealing with ARC FAULT circuit protection has undergone changes. The list of rooms and areas where the serving branch circuits are required to be protected by arc-fault circuit interrupter protection has grown from the previous bedroom areas to now include dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways or similar areas. It is effectively meant to include all areas of the dwelling, excluding only the kitchen, bathroom, garages and (unfinished) basements.
7. Section 210.12(B) Exception Number 1 provides for GFCI protection of a branch circuit to be provided by the first outlet in the branch. In order to utilize this exception, the wiring method from the point of origination of the circuit to the first outlet must be RMC, IMC, EMT, or Type AC Cable meeting the requirements of 250.118. The GFCI device used must also be a combination-type listed GFCI device. There are no longer length restrictions of the wiring method from the point of origin to the first outlet.
8. Section 210.52 (A) clarifies the use of switched receptacle outlets in other than kitchen and bathrooms. Only one receptacle of a duplex receptacle is permitted to be switched, thereby providing an outlet with continuous service to meet the requirements for convenience outlets in any particular room or location.
9. Section 210.52(E) has added a requirement for weatherproof receptacle outlets on porches and decks. On all balconies, porches and decks accessible from inside of the dwelling, at least one outlet shall be installed within the perimeter of the balcony or deck. An exception excludes balconies and decks with an area less than 20 square feet.

10. Section 210.52(G) clarifies that in all basements, attached garages and detached garages that are equipped with electrical service, at least one outlet in addition to those outlets used for specific equipment (such as sump pumps or water treatment equipment) shall be installed.
11. Section 210.60 has been revised to clarify that guest rooms, sleeping rooms in dormitories and guest suites in hotels and motels must comply with the receptacle outlet requirements for dwelling units found in 210-52(A).
12. Section 240.24(F) has added language prohibiting panels or overcurrent devices to be located over stairways. They may be permitted to be located over landings of stairways provided that the clearances found elsewhere in the code are provided.
13. Section 300.4(E) may be applicable to residential wiring methods. This section now provides that no cable or raceway shall be fastened directly to the bottom or within 1 ½ inches of any roof decking. This applies mostly to metal roofs where roofing fasteners may protrude through the roofing and damage electrical raceways or cables.
14. Section 300.5(C) requires all cables buried under or in concrete slabs – both inside and outside of the building – to be in a raceway. Text elsewhere further requires all conductor in a buried raceway to be rated for wet locations – even inside of a building.
15. Section 300.11(A)(2) has been revised but continues to require any and all electrical raceway installed above an acoustical ceiling to be supported by wires independent of the ceiling support system. Wires that support electrical raceways may be permitted to be attached to the ceiling assembly.
16. Section 314.27(A) deals with boxes installed for the support of luminaires (lights). All boxes that support luminaires must be listed for luminaire support and must be installed to support at least 50 pounds or, if designed to support more than 50 pounds, must be clearly identified as to what weight they will support.
17. Section 334.12 revises and further defines the permitted locations for NM and NMS cable. Locations that were previously listed as “where exposed to excessive moisture or dampness” have been changed to simply “in wet or damp locations.” Nonmetallic sheathed cable cannot be used in damp or wet locations.
18. Section 334.80 relates to the allowable ampacity of bundled NM conductors. The section now requires more than two NM cables with two or more current-carrying conductors run in a stud space that is draft-stopped with thermal insulation, sealing foam or caulking materials, or where said cables are completely surrounded in thermal insulation without maintaining spacing between cables, those cables shall be subject to derating in accordance with Table 310.15(B)(2)(a).
19. Sections 338.10 and 338.12 clearly differentiate the locations where USE and SE cables are permitted to be used and where they are not permitted. SE cable may not be used underground either with or without a raceway. Type USE cable may not be used for interior wiring or in most locations above ground outdoors.
20. Section 348.12 now forbids Flexible Metal Conduit (FMC) from being used in any wet location.
21. Section 406.8 now requires ALL 125-volt, 15 and 20 ampere receptacle outlets installed in dwelling units in locations specified in 210-52 to be listed, ***tamper-resistant*** receptacles.
22. Section 408.36 removed the distinction between power panelboards and lighting and appliance branch circuit panelboards. The limitation for panelboards of a maximum of 42 overcurrent devices has also been deleted.
23. Sections 422.51 and 422.52 have been revised to require vending machines and drinking fountains to be plugged into GFCI protected outlets.
24. Section 590.6 deals with changes to temporary wiring during construction, remodeling, maintenance, repair or demolition of structures. It requires all 125-volt, 15, 20 or 30-ampere circuits to be GFCI protected, whether the power is supplied through the electrical utility service or by an on-site generator.